

Title (en)  
EXTRUDER

Title (de)  
EXTRUDER

Title (fr)  
EXTRUDEUSE

Publication  
**EP 2550141 B1 20160323 (DE)**

Application  
**EP 11716170 A 20110324**

Priority  
• AT 4682010 A 20100324  
• EP 2011001477 W 20110324

Abstract (en)  
[origin: WO2011116965A1] The invention relates to an extruder having a housing (1), comprising at least two conveying shafts (2, 3) having mutually wiping conveying cross-sections which are disposed so as to be driven in the same direction in at least two housing bores (11, 12) which are of cylindrical or conical design and of which the axes (15, 16) are disposed parallel or at an angle to one another. The distance (A) between the axes of the two housing bores (11, 12) is greater than  $D/1.4142$ , wherein D is the diameter of the cylindrical bore or the greatest diameter of the conical bore, and a clearance (a') is provided between the housing bores (11, 12) and the external diameter (DE) of the conveying shafts (2, 3). Each conveying shaft (2, 3) has a plurality of conveying sections (17a to d, 18a to d), wherein the rotational angle of at least two adjacent conveying sections (17a, 17b, 18a, 18b) on the respective conveying shaft (2, 3) is  $180^\circ$ . The centre point (PM) of the cross-sectional profile of each cross-section (17a, 17b, 18a, 18b, etc.) is offset eccentrically in each case with respect to the centre point (BM) of the housing bore (11, 12) and the centre of rotation (DM) of the conveying shafts (2, 3).

IPC 8 full level  
**B29B 7/48** (2006.01); **B29C 48/395** (2019.01); **B29C 48/43** (2019.01); **B29C 48/52** (2019.01); **B29C 48/67** (2019.01)

CPC (source: EP KR US)  
**B29B 7/48** (2013.01 - KR US); **B29B 7/482** (2013.01 - US); **B29B 7/483** (2013.01 - EP US); **B29B 7/485** (2013.01 - EP US); **B29B 7/489** (2013.01 - EP US); **B29C 48/25** (2019.01 - EP US); **B29C 48/2715** (2019.01 - EP US); **B29C 48/395** (2019.01 - EP KR US); **B29C 48/40** (2019.01 - KR); **B29C 48/402** (2019.01 - EP US); **B29C 48/405** (2019.01 - EP US); **B29C 48/425** (2019.01 - KR); **B29C 48/43** (2019.01 - EP US); **B29C 48/435** (2019.01 - EP KR US); **B29C 48/44** (2019.01 - EP US); **B29C 48/505** (2019.01 - KR); **B29C 48/52** (2019.01 - EP US); **B29C 48/565** (2019.01 - EP US); **B29C 48/57** (2019.01 - EP US); **B29C 48/03** (2019.01 - EP US); **Y02P 70/10** (2015.11 - EP US)

Citation (examination)  
• WO 2011006516 A1 20110120 - BLACH JOSEF A [AT]  
• US 2005041521 A1 20050224 - HERTER RAINER [DE]

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**WO 2011116965 A1 20110929**; AT 509710 A4 20111115; AT 509710 B1 20111115; BR 112012025130 A2 20160621; CN 102834232 A 20121219; CN 102834232 B 20141203; EP 2550141 A1 20130130; EP 2550141 B1 20160323; ES 2577927 T3 20160719; JP 2013522088 A 20130613; JP 5866333 B2 20160217; KR 101832005 B1 20180223; KR 20130076804 A 20130708; RU 2012145010 A 20140427; RU 2568726 C2 20151120; US 2013259966 A1 20131003; US 9061452 B2 20150623

DOCDB simple family (application)  
**EP 2011001477 W 20110324**; AT 4682010 A 20100324; BR 112012025130 A 20110324; CN 201180015428 A 20110324; EP 11716170 A 20110324; ES 11716170 T 20110324; JP 2013500394 A 20110324; KR 20127027620 A 20110324; RU 2012145010 A 20110324; US 201113636194 A 20110324